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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/164,624	10/01/1998	YOSHIHIRO ISHIDA	35.C-13000	6892
5514 7590 04/29/2005 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER YE, LIN	
			ART UNIT 2615	PAPER NUMBER

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/164,624

Applicant(s)

ISHIDA ET AL.

Examiner

Lin Ye

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/7/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 24-41 filed on 12/22/04 have been considered but are moot in view of the new ground(s) of rejection. Since a new ground of rejection is being applied against previous allowed claims, this action is not made final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 24-25, 31-32, 37-38 and 41 rejected under 35 U.S.C. 102(b) as being anticipated by Paff U.S. Patent 5,164,827.

Referring to claim 24, the Paff reference discloses in Figures 1 -6, an image processing apparatus (any one of the slave cameras SD1-SD5 is considered as the image processing apparatus) comprising: an input unit (image and lens assembly 17, each of slave cameras SD1-SD5 has the same component configuration as the master camera MD, see Col. 3, lines 29-30 and Col. 3, lines 58-62) adapted to input image data; a reception unit adapted to

receive information of a distance to the object, for detecting a desired object, form an external apparatus that is not part of said image processing apparatus (the master camera MD and monitoring station 11 are considered as the “external apparatus”; the master camera **broadcasts** the coordinate position of the object S and a desired range value as the “information of a distance to the object” to any one of slave cameras SD1-SD5, see Col. 6, lines 56-60), via a communication interface (bidirectional communications paths 21, see Col. 3, lines 25-27); a detection unit adapted to detect the desired object corresponding to the information received by said reception unit (e.g., the slave camera SD2 first determines the distance between its projected position in plane 2 and the **received coordinate position** in the plane 2 of the desired object for detecting the distance D_{SD2} between the slave camera SD2 and the object S, see Col. 6, lines 62-65 and Col. 7, lines 1-9), from the image data input by said input unit and a transmission unit adapted as shown in Figure 5, in a case in which said detection unit detects the desired object, to transmit information reflecting detection of the desired object to the external apparatus via the communication interface (and if distance from a slave camera 2 to the desired object S is determined to be within **the desired range**, i.e., a radius of 30 feet, the slave camera SD2 will adjust its pan, tilt and zoom status, see Col. 7, lines 10-16; and the slave camera SD2 will reflecting detection of the desired object to the monitor station 11 for displaying the image of desired object on the monitors via the communication interface 21; otherwise if out of **the desired range**, the slave camera SD2 will not reflecting detection of the desired object to monitor station 11, see Col. 7, lines 54-66).

Referring to claim 25, the Paff reference discloses wherein said input unit of video slave camera SD comprises an image pickup unit (17, each of slave cameras SD1-SD5 has the same component configuration as the master camera MD, see Col. 3, lines 29-30 and Col. 3, lines 58-62) adapted to pick up the object image through an optical system.

Referring to claim 31, the Paff reference discloses all subject matter as discussed with respected to same comment as with claim 24.

Referring to claim 32, the Paff reference discloses all subject matter as discussed with respected to same comment as with claim 25.

Referring to claim 37, the Paff reference discloses in Figures 1 -6, an terminal apparatus (any one of the slave cameras SD1-SD5 is considered as the terminal apparatus) comprising: an input unit (image and lens assembly 17, each of slave cameras SD1-SD5 has the same component configuration as the master camera MD, see Col. 3, lines 29-30 and Col. 3, lines 58-62) adapted to input image data; a reception unit adapted to receive information of a distance to the object, for detecting a desired object, form an external apparatus that is not part of said terminal apparatus (the master camera MD and monitoring station 11 are considered as the "external apparatus"; the master camera **broadcasts** the coordinate position of the object S and a desired range value as the "information of a distance to the object" to any one of slave cameras SD1-SD5, see Col. 6, lines 56-60), via a communication interface (bidirectional communications paths 21, see Col. 3, lines 25-27); a detection unit adapted to detect the desired object corresponding to the information received by said reception unit (e.g., the slave camera SD2 first determines the distance between its projected position in plane 2 and the **received coordinate position** in the plane 2 of the desired object

Art Unit: 2615

for detecting the distance D_{SD2} between the slave camera SD2 and the object S, see Col. 6, lines 62-65 and Col. 7, lines 1-9), from the image data input by said input unit and a transmission unit adapted as shown in Figure 5, in a case in which said detection unit detects the desired object, to transmit information reflecting detection of the desired object to the external apparatus via the communication interface (and if distance from a slave camera 2 to the desired object S is determined to be within **the desired range**, i.e., a radius of 30 feet, the slave camera SD2 will adjust its pan, tilt and zoom status, see Col. 7, lines 10-16; and the slave camera SD2 will reflecting detection of the desired object to the monitor station 11 for displaying the image of desired object on the monitors via the communication interface 21; otherwise if out of **the desired range**, the slave camera SD2 will not reflecting detection of the desired object to monitor station 11, see Col. 7, lines 54-66).

Referring to claim 38, the Paff reference discloses all subject matter as discussed with respected to same comment as with claims 25 and 37.

Referring to claim 41, the Paff reference discloses all subject matter as discussed with respected to same comment as with claim 37.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 26, 27, 30, 33-34 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff U.S. Patent 5,164,827 in view of Salvati U.S. Patent 6,359,644.

Referring to claim 26, the Paff reference discloses all subject matter as discussed with respect to claim 25, but except Ito does not state the surveillance camera system can use focusing control information to measure the distance from the object to the predetermined position instead of the coordinates of the selected position in the reference plane 2.

The Salvati reference discloses in Figure 2, a video camera (10) comprises a lens system having selected optical characteristics and a CCD imager. The system includes a microprocessor/CPU that calculates the size of the target object by mathematically manipulating the optical characteristics, the focus data, the zoom data, and pixel data. The exact object distance is determined by feedback from the focus motor and calculating the deviation from zero. (See Col. 5, lines 25-30). This would be an advantage over the Paff's surveillance camera system in that it could achieve to change an object image into a distance image for the purpose of recognizing objects and get more accurate distance result as taught by Salvati. For that reason, it would have been obvious to one of ordinary skill in the art at the time to see the surveillance camera can associate the focusing control information for measuring the distance from the detected object to the predetermined position disclosed by Paff.

Referring to claim 27, the Paff and Salvati references disclose all subject matter as discussed with respect to claim 26, and the Salvati reference discloses wherein the image pickup unit comprises a zoom control unit adapted to control zooming of the optical system,

and said detection unit detects the object according to zoom control information generated by the zoom control unit (e.g., The Salvati's system includes a microprocessor/CPU that calculates the size and distance of the target object by mathematically manipulating the focus data, the zoom data. The exact object distance is determined by feedback from the focus motor and calculating the deviation from zero and the magnification factor M is determined by the position of the zoom servo-feedbacks 17, see Col. 5, lines 25-30).

Referring to claim 30, the Paff and Salvati references disclose all subject matter as discussed with respect to claim 26, and the Paff reference discloses wherein said image processing apparatus is used in a monitoring camera system (video surveillance system, See Col. 1, lines 5-10).

Referring to claim 33, the Paff and Salvati references disclose all subject matter as discussed with respect to same comment as with claims 26 and 31-32.

Referring to claim 34, the Paff and Salvati references disclose all subject matter as discussed with respect to same comment as with claims 27 and 31-32.

Referring to claim 39, the Paff and Salvati references disclose all subject matter as discussed with respect to same comment as with claims 26 and 37-38.

Referring to claim 40, the Paff and Salvati references disclose all subject matter as discussed with respect to same comment as with claims 27 and 37-38.

6. Claims 28-29, 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff U.S. Patent 5,164,827 in view of Karmann et al. U.S. Patent 5,034,986.

Referring to claim 28, the Paff reference discloses all subject matter as discussed with respect to claim 24, but except the Paff reference does not explicitly state the detection unit of slave cameras detects the object according to a difference value between pictures instead that master broadcast the coordinate position of the object.

The Karmann reference teaches in Figures 1-2, a detecting and tracking moving object system calculating a sequence of binary object masks by binarization of a difference image sequence formed from the input image sequence and the background image sequence using a threshold and determining the positions and size of the binary object (See Col. 3, lines 13-18 and lines 23-25). The Fujioka reference is evidenced that one of ordinary skill in the art at the time of the invention to see more advantages for the image processing apparatus can detect the moving object according to a difference value between pictures so that the apparatus can quickly track and determine the position of desired object without waiting for external input. For that reason, it would have been obvious to modify the system of Paff by providing the detection unit of slave cameras detects the object according to a difference value between pictures as taught by Fujioka.

Referring to claim 29, the Paff and Karmann references disclose all subject matter as discussed with respect to claim 28, and the Karmann reference discloses wherein said detection unit binarizes the difference value by using a predetermined threshold and detects the object according to a binarization result (See Col. 3, lines 13-18 and Col. 4, lines 34-42).

Referring to claim 35, the Paff and Karmann references disclose all subject matter as discussed with respect to same comment as with claim 28.

Art Unit: 2615

Referring to claim 36, the Paff and Karmann references disclose all subject matter as discussed with respected to same comment as with claim 29.

Conclusion


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Fujioka et al. U.S 4,908,704 discloses an apparatus for monitoring a moving object.
 - b. Blackshear U.S. 5,111,288 discloses a surveillance camera system comprises housing and board computer with a joystick and control unit for issuing instructions to the computer.
 - c. Ito et al. U.S. 6,108,033 discloses a difference between an input image including images of a background image picked up by an image pick-up unit.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Ye whose telephone number is (571) 272-7372. The examiner can normally be reached on Mon-Fri 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lin Ye
April 26, 2005


James J. Groody
Supervisory Patent Examiner
Art Unit 262-2615